REMARKS/ARGUMENTS

Claims 1-87 are pending in the Application after entry of this amendment. Claims 1-87 are rejected by Examiner. Claims 1, 17, 24, 40, 56, and 72 have been amended. Claims 16, 39, 55, and 87 have been canceled. No new matter has been added.

Interview Summary

Applicants conducted telephonic interviews of this application with Examiner Hoang on November 16, 2004 and November 30, 2004. During the interview of November 16, 2004, Applicants discussed the present application and pending rejections with Examiner Hoang. Per that discussion, Applicants have amended the independent claims.

During the interview of November 30, 2004, Applicants discussed with Examiner Hoang an error on the advisory action mailed 10/20/2004 indicating that the period for reply would expire on 9/15/2004. Applicants and Examiner Hoang agreed that the period for reply should instead expire on 10/20/2004. Accordingly, Examiner Hoang provided a supplemental advisory action correcting the error.

Applicants thank Examiner Hoang for conducting the telephonic interviews and for his continued consideration of this application.

Prior Art Rejections

Claims 1-7, 12-14, 17-30, 35-37, 40-46, 51-53, 56-62, 67-69, 72-78, and 83-85 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumme (U.S. Patent No. 6,134,559) in view of Hejlsberg (U.S. Patent No. 6,185,728). It is respectfully submitted that the claims as amended are patentable for the reasons set forth below.

Independent claim 1 as amended teaches:

> invoking an event handler method, using a delegate, by calling another method of an instance of a class for which parameters passed to the other method are also passed to the event handler method, wherein the parameters passed to the other method and to the event handler method comprise a sender parameter identifying an event source and an event arguments parameter comprising a package of a plurality of event arguments, a parameter list of the other method having a same signature as a parameter list of the event handler method, wherein the other method references the event handler method, and the delegate contains a reference to the other method;

creating an invocation list associated with the other method, the invocation list specifying one or more event handler methods to be invoked; and

dynamically altering contents of the invocation list. (emphasis added)

The present invention, as embodied in claim 1, uses a delegate-based event driven programming model to handle events (Application as filed, page 10, ll. 3-4). A delegate is an object that contains a pointer to a method, as well as a pointer to an object that the referenced method is to be applied (Id., page 10, ll. 5-7). An event handler method is invoked by calling another method of an instance of a class, and parameters that are passed to the other method are passed to the event handler method (Id. page 4, ll. 23-25). The passed parameters include a sender parameter, and an event arguments parameter (Id., page 25, ll. 1-3). The event arguments are packaged into a common base class to allow for a wide range of routing and handling scenarios (Id., page 25, ll. 10-12). None of the prior art, taken alone or in combination, discloses or suggests such features.

Brumme describes a system and method for integrating objects of foreign type systems into a single unified type system (Brumme, col. 4, ll. 2-4). Foreign object adapters are configured to support one or more foreign object systems (Id., col. 4, ll. 19-21). The foreign object adapters convert a class type from the foreign object system to a class type compatible with the single unified type system (Id., col. 4, ll. 39-41).

Hejlsberg teaches a visual development system which allows a developer/user to easily control object behavior, whether the user is working in a visual environment or a programming environment, or switching back and forth between the two (Hejlsberg, col. 3, ll. 43-47). The system features method pointers that allow a developer or programmer to achieve delegation between objects programmatically as well as visually (Id., col. 3, ll. 47-51).

Neither Brumme or Hejlsberg, alone, or in combination teach invoking an event handler method, using a delegate, by calling another method of an instance of a class for which parameters passed to the other method are also passed to the event handler method, wherein the parameters passed to the other method and to the event handler method comprise a sender parameter identifying an event source and an event arguments parameter comprising a package of a plurality of event arguments, as required by the claims. Hejlsberg is silent as to the parameters passed to the event handler method. Brumme describes passing argument to the event handler at column 15, lines 2-9, but explicitly states that additional arguments may

be passed as extra parameters. In contrast, the event arguments as described in claim 1, are all packaged together as a single events argument package and passed as a single parameter. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejection and allow claim 1.

Independent claims 17, 24, 40, 56, and 72 as amended contain similar limitations to claim 1 and are therefore allowable for the same reasons given for claim 1. It is requested that the Examiner withdraw the rejections and allow claims 17, 24, 40, 56, and 72.

With respect to rejected dependent claims 2-7, 12-14, 18-23, 25-30, 35-37, 41-46, 51-53, 57-62, 67-69, 73-78, and 83-85, they are all variously dependent on independent claims 1, 17, 24, 40, 56, 72 and are therefore all allowable for at least the reasons given above. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejections and allow the claims.

Claims 8-11, 31-34, 47-49, 50, 63-66, 79-82 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Brumme in view of Hejlsberg and in further view of Wold (U.S. Patent No. 5,724,589). It is respectfully submitted that these claims are patentable for reasons set forth below.

Wold describes a system for providing a property-method-event programming model for developing context-free reusable software components (Wold, col. 3, ll. 57-60). The system allows developers to create pre-packaged C++ software components that can be plugged into an existing design (Id., col. 3, ll. 61-64).

As described above, Neither Brumme nor Hejlsberg, alone or in combination, teach invoking an event handler method, using a delegate, by calling another method of an instance of a class for which parameters passed to the other method are also passed to the event handler method, wherein the parameters passed to the other method and to the event handler method comprise a sender parameter identifying an event source and an event arguments parameter comprising a package of a plurality of event arguments, as required by the claims. Wold fails to cure the deficiencies of Brumme and Hejlsberg. It is therefore respectfully requested that the Examiner withdraw the rejection and allow claims 8-11, 31-34, 47-49, 50, 63-66, and 79-82.

Claims 15, 38, 54, 70, and 86 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Brumme in view of Hejlsberg and in further view of Kimura (U.S. Patent No. 6,292,849). It is respectfully submitted that these claims are patentable for reasons set forth below.

Kimura describes a system for sharing objects by multiple application programs (Kimura, col. 2, ll. 13-15). The system comprises plural control objects used as common objects, each object further comprising a first function for serving properties to an application program, another control object, and a second function for posting events (Id., col. 2, ll. 15-20).

As described above, Neither Brumme nor Hejlsberg, alone or in combination, teach invoking an event handler method, using a delegate, by calling another method of an instance of a class for which parameters passed to the other method are also passed to the event handler method, wherein the parameters passed to the other method and to the event handler method comprise a sender parameter identifying an event source and an event arguments parameter comprising a package of a plurality of event arguments, as required by the claims. Kimura fails to cure the deficiencies of Brumme and Hejlsberg. It is therefore respectfully requested that the Examiner withdraw the rejection and allow claims 15, 38, 54, 70, and 86.

CONCLUSION

Applicant respectfully requests reconsideration of the claims and early issuance of a Notice of Allowance.

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Jonathan M. Waldman
Registration No. 40,861

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439